Title (en)
Aircraft fuselage drag reduction blivet

Title (de)
Flugzeugrumpfausbauchung zur Luftwiderstandsreduzierung

Title (fr)
Renflement de fuselage d'aéronef pour réduire la traînée

Publication
EP 2650209 A3 20140122 (EN)

Application
EP 13159214 A 20130314

Priority
US 201213445815 A 20120412

Abstract (en)
[origin: EP2650209A2] An air vehicle fuselage (2) adapted for transonic operation is disclosed. The fuselage has a body (6) and a close-out (8). A lower surface of the body (6) has a first waterline value at the transition (14) to the close-out. A lower surface of the close-out (8) has a waterline value that varies along a fore-aft direction of the fuselage and is equal to the first waterline value at the transition station (14) and connects to an upper surface of the close-out at an aft end of the close-out. The fuselage (2) also has a drag-reduction blivet (20), i.e. a local deformation deviating from a conventional smooth profile, disposed on the lower surface of the close-out. The blivet includes a first region (A) wherein the lower surface drops to a point comprising a third waterline value that is below the first waterline value and a first inward radius and then rises over a second region (B) disposed aft of the first region wherein a second radius that is a minimum radius of the lower surface within the second region is greater than the first radius.

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CPC (source: EP US)
B64C 1/0009 (2013.01 - EP US); B64C 2001/0045 (2013.01 - EP US); Y02T 50/10 (2013.01 - EP US)

Citation (search report)
- [XI] EP 1407963 A2 20040414 - BOEING CO [US]
- [X] GB 223613 A 19241020 - JOHN GUMBLETON CURRIE

Cited by
CN104594769A

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DOCDB simple family (publication)
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